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Title: Your Role as a Program Manager in Pit Production Mission Integration (PPMI-DO)

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LA-UR

Your Role as a Program Manager

in Pit Production Mission Integration (PPMI-DO)

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Los Alamos NATIONAL LABORATORY

Your Role as a Program Manager in PPMI

PPMI-DO

May 6, 2021

Course Overview

Your Role as a Program Manager in PPMI

1.5 hour
RLUOB RM 4501
2:00 pm start

Orientation Objectives

- Program Director's perspective on managing PPMI programs
- Roles and Responsibilities
- Explore the program life cycle and identify success factors at each step in the process
- Apply effective leadership strategies for program management
- Identify, analyze and mitigate risks

Customer Engagement and Communications

30 minutes
RLUOB RM 4501
3:30 pm start

Objectives

- Building relationships through effective communication Day 1

Customer Engagement and Communications

2 hours
RLUOB RM 4501
1:00 pm start

Objectives

- Building relationships through effective communication Day 2

Welcome Activity- Introduce a colleague

- Pair up with a colleague you either do not know or do not know well
- Remember to practice social distancing- find a place where your "team" can talk
- Learn your partner's name, their position in PPMI, and how long they have been at LANL
- Then each "partner" will ask the following five questions:
  1. What is one non-work related goal that you would like to achieve in the next five years?
  2. What's the bravest thing you have ever done?
  3. Best sandwich ever. What's on it?
  4. What's the best vacation you have ever taken?
  5. What is the best piece of advice you have been given?
- Introduce each other to the rest of the group

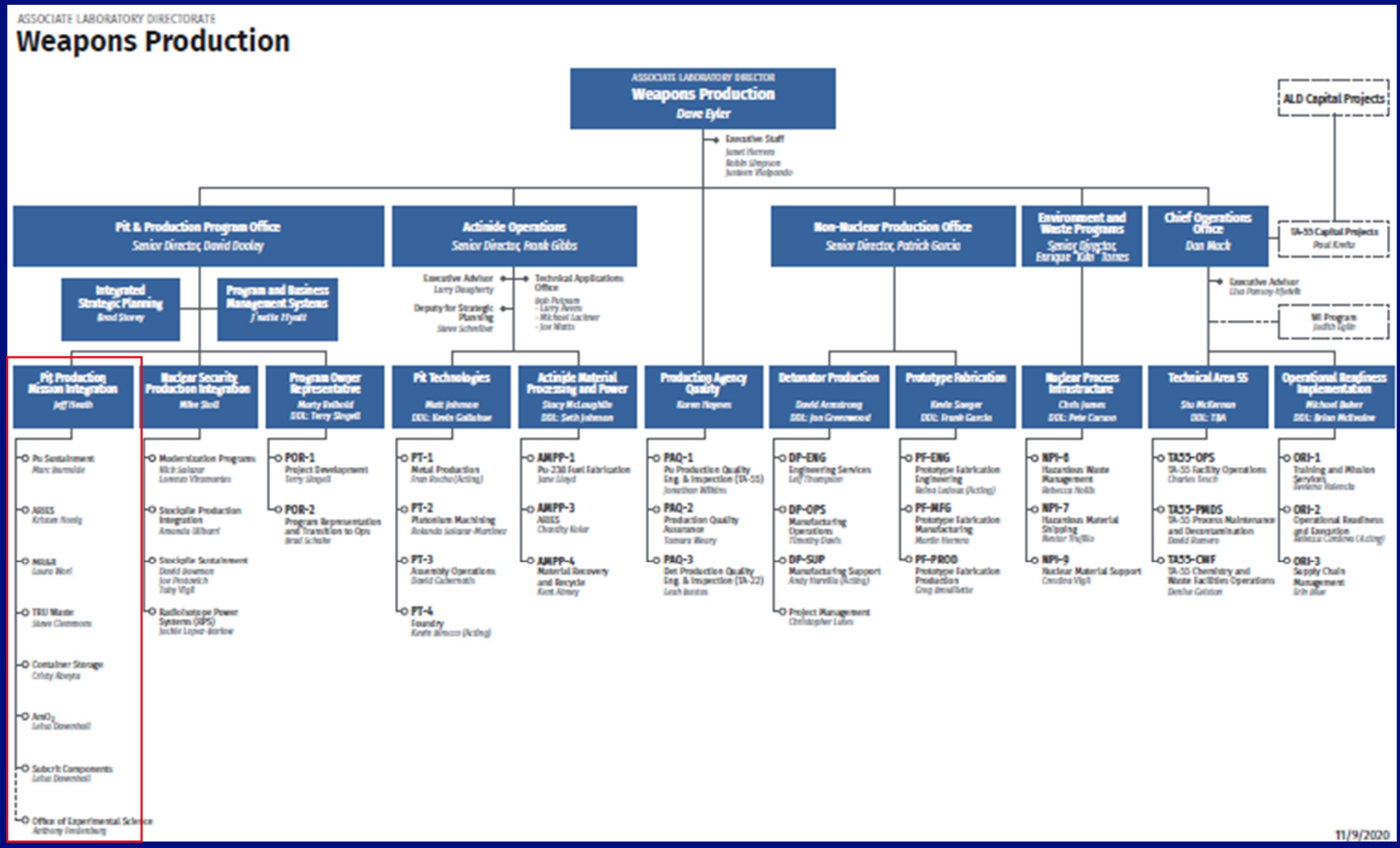
Welcome to PPMI- A Leader's Perspective

- PPMI's Mission

  PPMI is responsible for integrating the planning, execution, and reporting for LANL's Pit Manufacturing efforts, surplus plutonium disposition activities, the Material Recycle and Recovery (MR&R) program, and other programs of national significance. Our programmatic sponsors rely on PPMI to capitalize on the unique capabilities and expertise in PF-4 (the only Security Cat I/Haz Cat II Pu processing facility in the Nation) and other vital facilities across the laboratory to deliver on mission critical products in support of National Security.

- Why are you here today
- How does your job fit into LANL's mission

PPMI as part of ALDWP



Pit and Production Program Office- David Dooley

Primary Role	Responsibilities	Authorities	Accountabilities
Providing program and infrastructure planning and scheduling to support mission delivery **Integrating Weapons Production activities with other directorates (e.g., project implementation)**	• Establish integrated program baseline to enable delivery in WP Facilities • Customer relations • Business analysis • Financial & Shared Program Services Cost Recovery (distributed direct) management • Program reporting and communication including Performance Evaluation and Management Plan (PEMP) • Identification of staffing and capability needs • Prime contract management • Program and facility layout change control • Establish and maintain the programmatic system description	• Negotiating scope & funding • Strategic planning • Forecasting • Baseline program schedule and budget development and maintenance • WP prime contract interface • Change control	• Safe performance of work • Accomplishment of integrated mission(s) • Establishment of integrated program baseline to monitor and report progress and to ensure delivery of WP Program

Pit Production Mission Integration- Jeff Heath

Primary Role	Responsibilities	Authorities	Accountabilities
Integrating the planning, execution, and reporting to support LANL's Pit Manufacturing efforts, surplus plutonium disposition activities, the Material Reuse and Recycle (MR&R) program, and other programs of national significance. **Capitalizing on the unique capabilities and expertise in PF-4 and other vital facilities across the laboratory to deliver on mission critical products in support of National Security.**	• Establish integrated program baseline to enable delivery in WP Facilities • Customer relations • Business analysis • Program reporting and communication including contributions to the Performance Evaluation and Management Plan (PEMP) • Identification of staffing and capability needs	• Negotiating scope & funding • Strategic planning • Forecasting • Baseline program schedule and budget development and maintenance	• Safe performance of work • Accomplishment of integrated mission(s) • Establishment of integrated program baseline to monitor and report progress and to ensure performance and milestone delivery of PPMI programs

Your Role as a Program Manager 1

- As a PM1 you will work under the supervision of a senior program manager (SPM) and your focus will be internal

- Planning and Execution
  - Contribute to defining work scope, schedules, and budgets
  - Contribute to defining milestones and deliverables
  - Act as or with the Control Account Manager to track and review the performance and financial management (cost, schedule, progress) of specific projects
  - Provide input to the annual program execution/implementation plan

- Reporting and Communication
  - Understand the established reporting and documentation requirements
  - Contribute to required reports
  - Inform your senior program manager of developing issues- **DO NOT** Assume that the SPM is aware of the issue
  - **DO NOT** provide information to the customer without working through your SPM

Your Role as a Program Manager 1- continued

- Risk Management
  - Provide information to help identify potential portfolio or program risks
  - Contribute to the development of risk mitigation strategies
  - Recommend risk acceptance/avoidance solutions

- Institutional Awareness
  - All workers are responsible for safety and security
  - Pause Work if you feel it is unsafe or poses a security risk
  - Understand and adhere to Laboratory policies
  - Develop and maintain a working knowledge of the relevant technical discipline specific to your program

Your Role as a Program Manager 2

- As a PM2 you will work under the supervision of a senior program manager (SPM) and your focus will be internal **with some limited external interactions**

- Planning and Execution
  - Contribute to defining work scope, schedules, and budgets
  - Contribute to defining milestones and deliverables
  - **Develop work packages and authorize work once the package is approved by the SPM**
  - **Work with the SPM to allocate budget resources**
  - Act as or with the Control Account Manager to track and review the performance and financial management (cost, schedule, progress) of specific projects
  - Provide input to the annual program execution/implementation plan
  - **Participate in strategic planning and identifying resources to meet customer needs**

- Reporting and Communication
  - Understand the established reporting and documentation requirements
  - Contribute to required reports
  - Inform your senior program manager of developing issues- **DO NOT** Assume that the SPM is aware of the issue
  - **DO NOT** provide information to the customer without working through your SPM

Your Role as a Program Manager 2- continued

- Risk Management
  - Provide information to help identify potential portfolio or program risks
  - Contribute to the development of risk mitigation strategies
  - Recommend risk acceptance/avoidance solutions

- Institutional Awareness
  - All workers are responsible for safety and security
  - Pause Work if you feel it is unsafe or poses a security risk
  - Understand and adhere to Laboratory policies
  - Develop and maintain an intermediate knowledge of the relevant technical discipline specific to your program

PPMI Management Roles

Control Account Manager (CAM)	PM 1	PM2	PM 3	PM 4 (Senior Program Manager)
Within the EVMS, a control account is the lowest level in the WBS where all data elements exist. Control account managers are responsible for one or more accounts. Their responsibilities include schedule planning and status, actual cost collection, cost and variance analysis, resultant corrective action, and estimating costs at completion.	Internally focused position under the supervision of a Senior Program Manager. Assigned to manage specific tasks or elements of the program. Contribute information to the development of budgets and schedules. Contribute to required reports.	Internally focused position under the supervision of a Senior Program Manager. With direction from the SPM may have limited engagement with HQ sponsors or other stakeholders. Assigned to manage specific tasks or elements of the program. Assist in the development of budgets and schedules. Contribute to required reports.	Manages a group of related projects, subprojects and smaller programs in a coordinated way. They often delegate tasks to assigned resources, oversee budgets and schedules, and responsible for meeting milestones and deliverables. Interacts extensively with HQ sponsors as the laboratory representative for specific programs	Manages a collection of projects, programs, and subportfolio activities (components) grouped together to facilitate the effective management of work to meet strategic institutional objectives Acts as the institutional representative to HQ sponsors and other stakeholders on specific objectives

Portfolio, program and project components

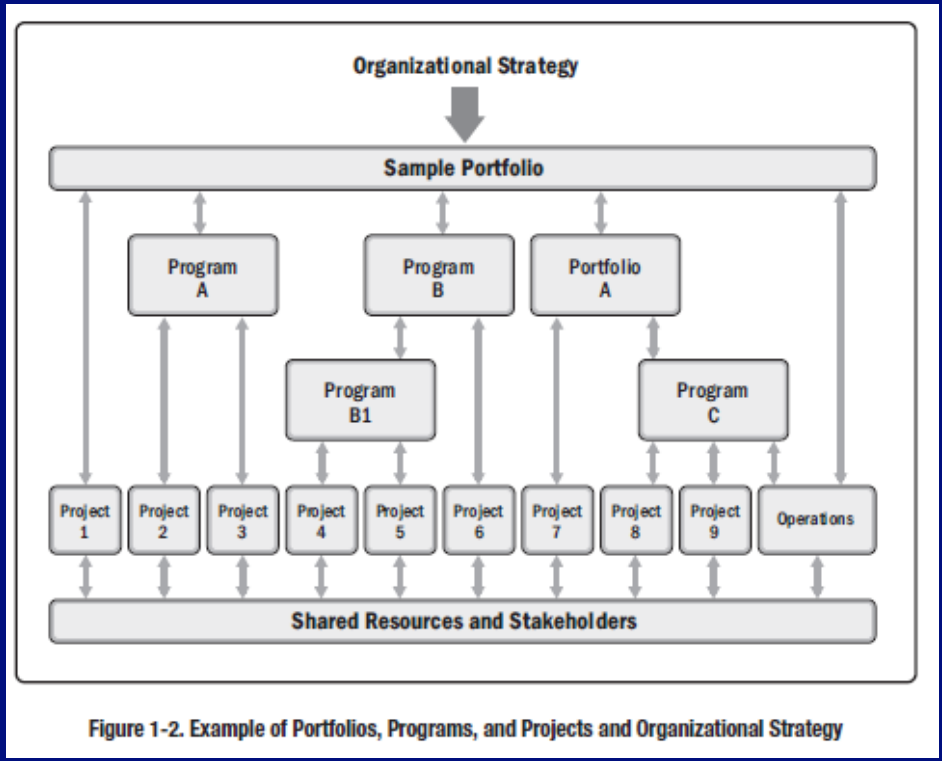
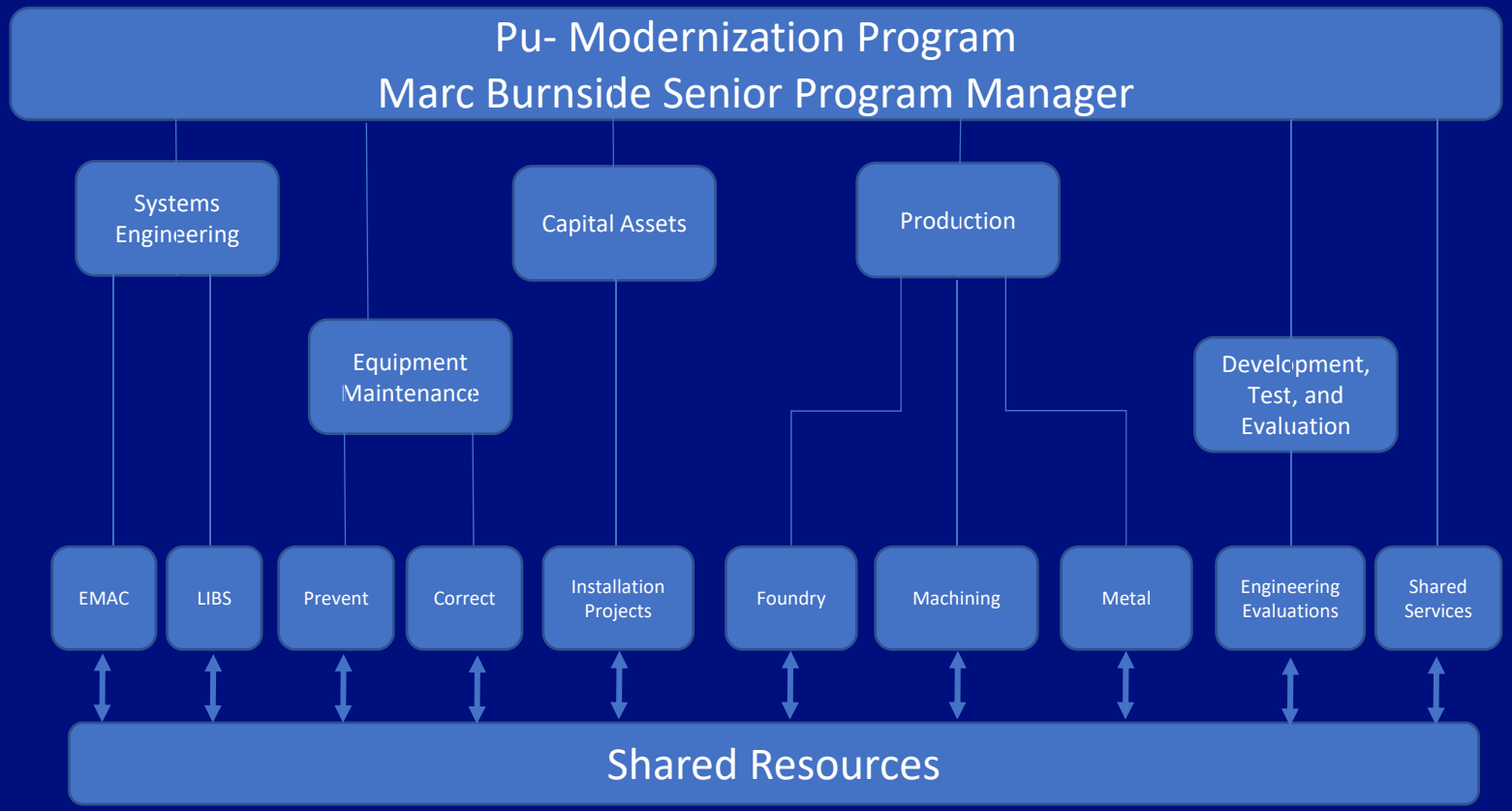


Figure 1-2. Example of Portfolios, Programs, and Projects and Organizational Strategy

From The Standard for Program Management, Fourth edition, Project Management Institute, 2017, ISBN: 978-1-62825-196-8

Program Management Roles in PPMI-
Pu- Modernization as an example (chart is not comprehensive)



Ask Me Anything- Breakout Session

- Divide the group into small teams
- Each group should move to a different part of the room (REMEMBER TO SOCIAL DISTANCE AT LEAST 3-6 FEET)
- Take ten minutes to ask your facilitator anything, i.e.-
  - How does my role help your program
  - Did you ever work as a PM1 or PM2
  - How long have you been at LANL
  - What superhero power do you wish you had?

- Come back together as a group
- Each team will introduce their facilitator and talk about some of the things you discussed

Program Life Cycle
Where do we find success?

K. Eby, 2018, www.smartsheet.com

Success - THE PLAN

A clearly defined Plan is essential to success

What is “enough detail?”

- It’s enough when the plan clearly describes a consistent vision to multiple stakeholders
- It’s enough when the entire team can execute with confidence
- It’s enough when you can understand (control) how the elements of the program (individual processes, projects, or steps) are proceeding
- It’s enough when you and your stakeholders agree on the endpoint definition

The value of the Program Plan is in its preparation

Brings disparate stakeholders into agreement on the scope and approach

Provides a baseline to measure change requests against

Brings program risks out in the open

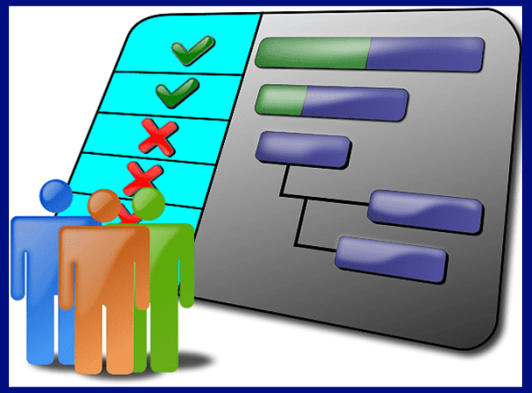
Opportunity to bring minor stakeholders/participants into the project

When your customer wants to see action immediately, you have to have the patience to get this right before allowing execution to begin

Success - Tools

Work Breakdown Structure (WBS)

- Using a work breakdown structure lets you divide the scope of the project into smaller pieces
- The WBS defines and organizes deliverables, tasks, and budgets
- A poorly defined WBS can cause the program to fail
  - Lack of resources
  - Scope creep
  - Staff are unsure of what needs to be accomplished
  - Timelines are misunderstood



Primavera (P6)

- P6 is required for all programs in PPMI
- P6 can help you identify:
  - the sequence of tasks that add up to the longest overall duration,
  - whether there are dependencies (tasks that cannot start until another task is finished),
  - if you need to establish contingencies,
  - if there are risks that need to be mitigated, and
  - how to increase efficiency.

Success- Scheduling

- "Our schedule was too optimistic"
  - Sponsors appreciate working with people who get things done but taking on too much can lead to being overwhelmed and then things get dropped or overlooked
  - Being too conservative can also lead to nothing getting down- "Paralysis by Analysis"
  - Schedule contingency is as valid as cost contingency…use it in the baseline
  - Your goal should be a realistic schedule
- Sponsor has an aggressive need date
  - Understand the need for the aggressive goal (trying to save money, just being aggressive, links to other major deliverables [launch date]), there may be options
  - There are several ways to crash a schedule: employee overtime, serial vs parallel activities, pay premium prices for early delivery of materials, eliminate scope, and remove all controls and QA steps
  - Aggressive schedules come with costs and risks…the sponsor needs to understand both carefully

Scheduling needs to be done within an understanding of the associated risks and the results of each communicated to the sponsor

Success - Scope

- Undefined scope means that not everyone has a similar vision of what you are trying to accomplish
  - You may agree on the size, but have different understandings on the quality level or other detailed requirements
  - Sometimes a mock-up, or detailed surveys are necessary to reach an understanding
  - A common challenge is the need to get involvement from all stakeholders during the project definition phase when they aren't interested yet
- Changing scope is a given, its impact to the project will depend on the planning process
  - Get the change process (i.e., communication, approvals) defined early
  - Over communicate to sponsor and other stakeholders where change may occur and the possible impacts
  - Surprise changes are never pretty, from communicating to the sponsor to minimizing their impacts
  - What often looks like a problem with changing scope, more often than not is an undefined scope problem that resulted from poor planning

Success - Financials

- Bad estimates set the stage for most cost problems
  - Scope was not included in the estimate
  - Cost sensitive requirements were not factored into the estimate
    - Quality Assurance
    - Engineering
    - Security
  - Was that number burdened or unburdened?

- Performing work not authorized or doing poor work (slow, rework, etc.) can impact budget
  - Monitoring and control processes are your indicators, but 30 days late
  - Day-to-day observations and conversations are your only early indicators

- Design the cost string structure to help see problems and opportunities
  - Generally base the design around the project's work breakdown structure
  - Think about what different reports or information you may need during execution to understand the project's costs
    - Procurements vs LANL labor?
    - Organizations (disciplines)?
    - Project components?
    - Fiscal years?
    - "Color" of money?

Oracle Cost String: YYYYYA XXXX0 ZZZZ WWWW

YYYYYA	XXXX0	ZZZZ	WWWW
CC: Cost Center (Org Code)	PC: Project Code (Program Code)	CA: Cost Account (Task)	WP: Work Package (Task)

Success – Resources, Integration, and Expectations

- Programs expend scarce often hard-fought for resources, and the sponsor demands a benefit
- Advanced, thorough planning is needed to have any confidence that you will get the resources when you need them, and get them off the project when you don't need them
- Double-check qualifications against the entire scope of their duties (technical understanding is one thing, how about safety, security, quality, change management, risk analysis, etc.?)
- Be prepared to have your resources re-assigned unexpectedly by their home organization due to priorities
- Make sure requirements are known by the team before they begin work
- Review schedules for inherent integration conflicts
- Deliberately identify points of interface and establish communication processes that keep them linked together

Success – Quality Assurance and Quality Control

- QA requirements that are too stringent or too lenient are bad
- Requirements that are too stringent can develop from an answer that was not thought out or planned- this adds costs and oversight that are not necessary and, if unintended, may not have been planned properly.

The consequences of being locked into an answer provided off-hand or without analysis

- Requirements that are too lenient do not provide the framework to establish what is a quality product
  - Commercial grade dedication after-the-fact is expensive and time consuming
  - Non-conformance reports are expensive to process, time-consuming, distracting to ongoing work, and a negative indicator of the project's health

There is no "close enough" in the work we do.

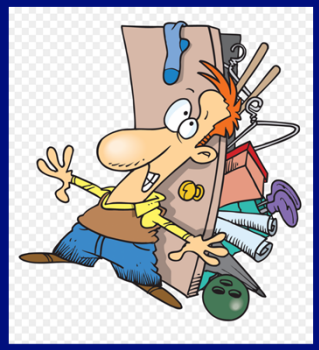
- Bring a quality expert onto the team early in the process to help navigate the requirements

Success - Reporting

- Status reporting is of utmost importance
- Reporting keeps stakeholders informed of critical aspects of program health such as schedule, issues, scope, resources, cost, etc.
- Reporting allows management to take action to address performance, issues, and risks
- Reports can also be used to provide a documented history of the **project** and the **program**
- No ones likes paperwork, but this is not paperwork; this is defining, managing, and communicating expectations

Remember the quality of your reporting is the most visible representation of the quality of your program

Success – Close Out



- Safely, securely, and compliantly close out each project.
- Decommissioning activities often require non-trivial resources and must be planned for accordingly
- All costs must be appropriately posted to the Oracle E-Business suite, verified, and then project codes closed
- Purchased or existing equipment that is used for the project is an institutional resource and made available for other mission-related activities
- If you do not plan for close out, you may be left with significant work and no resources or budget to complete those tasks
- Imagine the lasting impression on a sponsor if you have celebrated a successful project, completed all deliverables, and brought the milestones in on budget, and then you have to go back and ask for additional funds

Building the Program Life Cycle- Breakout Session

- Divide the group into small teams
- Hand each team one of the projects
- Separate to different parts of the room (REMEMBER TO SOCIAL DISTANCE AT LEAST 3 FEET)
- Each team has ten minutes to finish the project
- Come back together as a group for discussion

Effective Leadership Strategies

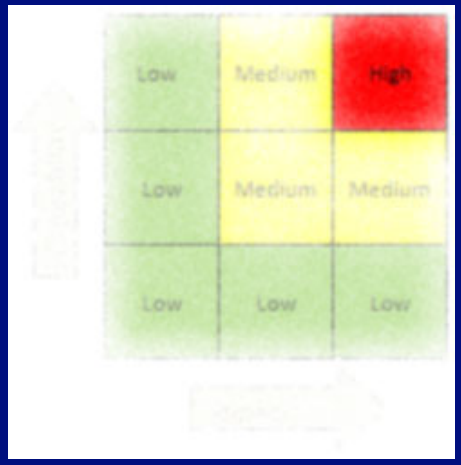
- **Ability to clearly define your vision**
  - Long term and measurable
  - What is our purpose
  - Where are we going?
  - How will we know when we get there?
  - A clearly defined vision with a defined destination allows you to know where you are at any given time and if you are getting closer to or further away from the destination.
- **Anticipate and learn**
  - be alert
  - try to anticipate circumstances by analyzing the environment and new needs
  - How fast do you detect threats, risks, and issues?
  - Take advantage of the signs of change
  - Be agile and prepare yourself to change course

Effective Leadership Strategies

- **Explore your options**
  - Look at alternatives before making a decision
  - Be flexible when trying to resolve issues
  - Get informed to get an adequate perspective
  - When you make the decision stand behind it
  - If you made a mistake, own the criticism, and reconsider how to move forward
- **Develop your team**
  - Take a step forward and delegate to your team.
  - Let others demonstrate their value
  - Recognize and reward initiative
  - Delegating and empowering will give you more time and will build in a natural succession plan.

Identify, Analyze, and Mitigate Risk- Develop a R.O.M.P

- A risk is not an issue, an issue is not a risk
  - A risk is a possible future event that may impact the project positively or negatively
  - An issue is a real, current problem that must be solved to minimize its impact
- All projects have risk, ignoring them will not make them go away
- You are predicting the future, do not expect great precision but you should spend time thinking about those changes or events that could disrupt your program
- A lot of risks can be mitigated if they are addressed upfront in the project or program plan
- Prepare early but revisit often- as the program develops and circumstances change, risks will also change and evolve
- Involve your stakeholders so that they understand each risk as it is identified and the role they can play in addressing and mitigating risks



Effectively communicating your risk management plan keeps everyone aware- better to know what could happen than do damage control after a risk is realized

Wrap-up Discussion

- Think back to the vision for PPMI and why we wanted to have this training
- Remember this is about what we do well and what we can focus on doing even better
- The quality of our work in PPMI is the magnifying glass through which DOE/NNSA sees the laboratory
- Take five minutes to reflect on what we have covered today. Write down:
  - **One new thing they have learned**
  - **One thing they have un-learned,**
  - **And one learning that got reinforced as a result of the training.**
- Using the note cards that are being passed out, write down-
  - **Your name and position**
  - **Two things you're going to do after this training to successfully apply the material,**
  - **And what can we do to assist you?**